North Carolina Program Integrity Sampling/Extrapolation Practicum

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Big Picture

Small Picture

N.C. Sampling Policy Guidelines

- Minimum of 100 claim details per sample

- Maximum of 4 strata, with 30 claim details per strata

- Use lower bound 90% confidence level difference amount for recoupment

- <u>Both</u> paid and claims error rates must fall below 5% for extrapolation to not

N.C. Sampling Policy Guidelines

- Simple random sampling is one strategy
- Cluster sampling can be used (pulling all claims for a date of service, ambulance example)
- Must review a minimum of 30 clusters – 15 per strata
- Previous slide cutoffs still apply
- Extrapolate at the cluster level

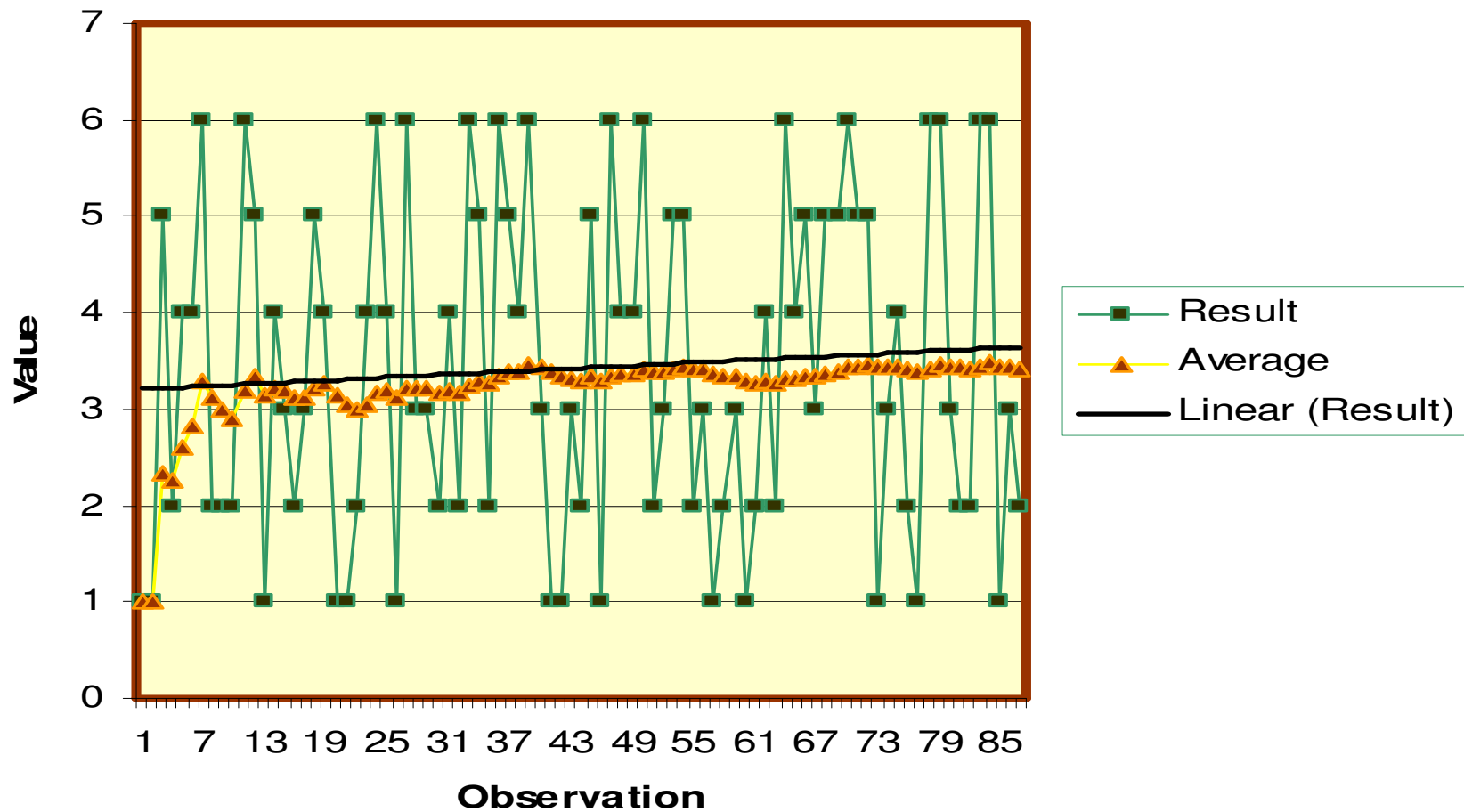NC Department of
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Steps in Process

- Describe population with summary statistics
- Stratify based on summary
- Determine sample size per strata
- Generate random numbers
- Pull sample
- Perform audit
- Extrapolate

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Law of Large Numbers

Simulated rolling of dice

Population Summary

- Determine count of total claims
- Determine mean, median, standard deviation
- Determine range from low to high
- Determine strata cutoffs

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Stratification Summary

- Determine count of claims per strata
- Determine mean, median, standard deviation per strata
- Enter information in RAT-STATS sample size determiner to obtain sample size
- Follow PI sample guidelines

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Generate Random Numbers & Pull Sample

- Use RAT-STATS random number generator to produce random numbers
- Number records in population from 1 to total for each strata
- Match random numbers to population numbers to pull sample

Audit Sample & Extrapolate

- Determine amount that should be paid for each record in sample

- Enter information in RAT-STATS variable appraisal module to determine extrapolated amount

- Compare extrapolated figures to original for precision

- Use lower bound 90% difference figure

Problems Encountered After the Audit

- Dates outside of allowed range – be sure to check them first!! If still a problem use RAT-STATS Post-stratification module

- Service types that cannot be extrapolated – Post-stratification

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Remember the Big Picture!!

1. Goal is to go from sample to population

2. All steps aimed at measuring the population total

Big Picture Again